1. The stirring action helps molecules reach the surface of the soup faster so that they are able to evaporate ✓

2. the substance will be in the solid phase ✓

3. The strongest van der Waals force is hydrogen bonding ✓

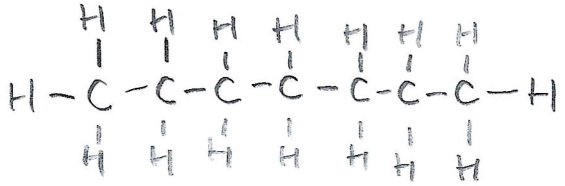
4. The products decrease the cohesive forces in a liquid ✓

5. The atmospheric pressure is low, therefore the boiling point for a liquid will be below its normal boiling point ✓

6. Chemists use the Born-Haber cycle to calculate the amount of lattice energy in ionic crystals ✓

7. a. The largest temperature is T_2 ✓

   b. at T_2 the liquid will take the longest to evaporate ✗ T_1

8.  ✓

9. RbBr, ICl, Br_2 ✓

10. H_2S, H_2Se, H_2Te, H_2O ✓

11. The phase the compound is in is gas ✓

12. 51°C or 52°C ✓

13. Pressure: 35 torr
    Temperature: 6°C ✓

17/18

94%

14. below 6°C ✓

15. a. NO: covalent
    b. H_2S: covalent
    c. Co: Metallic
    d. F_2: covalent
    e. $FeCl_3$: Ionic
    f. Ag: Metallic

✓

16. $$r = \frac{\sqrt{2}(\ell)}{4} \Rightarrow r = \frac{\sqrt{2}(4.050\text{Å})}{4} = 1.4319\ \text{Å}$$ ✓